

Appl. No. 09/995,464  
Reply to Office Action of January 13, 2005

Docket No. EMC-019AUS

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

- 1 1. (Currently Amended) In a remote data mirroring arrangement of data storage systems, a  
2 method of operating a data storage system comprises:  
3 determining that storage traffic is to be transferred between the data storage system and a  
4 remote data storage system to which the data storage system is coupled by an IP network in  
5 accordance with a remote data service application;  
6 using an interface between the remote data service application and a TCP/IP protocols  
7 software layer to form a connection to the IP network, wherein the interface is split across two  
8 processors, with a first interface portion residing on a first processor and a second interface  
9 portion residing on a second processor; and  
10 enabling transfer of the storage traffic between the data storage system and the remote  
11 data storage system over the IP network using a ~~native~~ the connection to the IP network.
- 1 2. (Original) The method of claim 1, wherein the IP network is the Internet.
- 1 3. (Original) The method of claim 1, wherein the IP network is a private network.
- 1 4. (Currently Amended) The method of claim 1, wherein ~~enabling comprises using a the~~  
2 interface comprises a socket interface to interface an operation of the remote data service  
3 application to the TCP/IP protocols software layer.
- 1 5. (Currently Amended) The method of claim 4, wherein the native connection comprises  
2 TCP/IP over Gigabit Ethernet.
- 1 6. (Cancelled)

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1 7. (Currently Amended) The method of claim 6, wherein the first socket-relay interface  
2 portion and the remote data service application operation-conform to a common interface.

1 8. (Original) The method of claim 4, wherein enabling further comprises using the  
2 socket interface to create a socket from which the native connection to the IP network is formed.

1 9. (Currently Amended) A computer program product residing on a computer-readable  
2 medium for operating a data storage system in a remote data mirroring arrangement of data  
3 storage systems, the computer program product comprising instructions causing a computer to:  
4 determine that storage traffic is to be transferred between the data storage system and  
5 a remote data storage system to which the data storage system is coupled by an IP network in  
6 accordance with a remote data service application;  
7 and  
8 use an interface between the remote data service application and a TCP/IP protocols  
9 software layer to form a connection to the IP network, wherein the interface is split across two  
10 processors, with a first interface portion residing on a first processor and a second interface  
11 portion residing on a second processor; and  
12 enable transfer of the storage traffic between the data storage system and the remote data  
13 storage system over the IP network using a native the connection to the IP network.

1 10. (Currently Amended) A data storage system for use in a remote data mirroring  
2 arrangement of data storage systems comprising:  
3 one or more storage devices;  
4 a controller coupled to the one or more storage devices; and  
5 wherein the controller is configured to determine that storage traffic is to be transferred  
6 between the data storage system and a remote data storage system to which the data storage  
7 system is coupled by an IP network in accordance with a remote data service application, use an  
8 interface between the remote data service application and a TCP/IP protocols software layer to  
9 form a connection to the IP network, and enable transfer of the storage traffic between the data  
10 storage system and the remote data storage system over the IP network using the connection to

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- 11 the IP network, wherein the interface is split across two processors, with a first interface portion  
12 residing on a first processor and a second interface portion residing on a second processor~~directs~~  
13 ~~local storage traffic from the data storage system to a remote data storage system over an IP-~~  
14 ~~network using a native connection to the IP network.~~